X-501-1P US PATENT

Amendments to the Abstract:

Please cancel the previous Abstract, and replace it with the following new Abstract:

A tunable narrow-band filter that includes a sigma-delta modulator. In one embodiment, a conventional DC canceler is modified to include a re-quantizer in the feedback loop in the form of a $\Sigma\Delta$ modulator. In another embodiment, a digital receiver employs a processing chip, such as an FPGA, that includes a $\Sigma\Delta$ modulator to requantize oversampled control signals in the digital receiver. In still another embodiment, a wide-bandwidth sigma-delta loop has a tunable center frequency.